

IN THE SPECIFICATION:

- Please replace the paragraph beginning at page 3, line 26, with the following:

The guidewire abutment may be located proximal of the distal and end of the guidewire.

- Please replace the paragraph beginning at page 6, line 27, with the following:

~~the~~ The proximal end of the filter support frame and the inlet end of the filter body are preferably attached to the proximal end of the sleeve.

- Please replace the paragraph beginning at page 12, line 25, with the following:

a catheter defining a reception space at a distal end of the catheter for receiving a collapsed embolic protection filter; and

- Please replace the paragraph beginning at page 13, line 15, with the following:

~~the~~ The loading device preferably comprises a funnel, the inlet end defining a larger cross-sectional cross-sectional area than the outlet end. Ideally the loading device comprises a main support having a funnel-shaped bore formed from a frusto-conical frustoconical embolic protection filter receiving portion terminating in a cylindrical portion formed by a loading tube projecting from the main support for alignment with the reception space before loading.

- Please replace the paragraph beginning at page 14, line 11, with the following:

The retaining means may comprises comprise a channel for receiving the loading device and/or the catheter and/or the pushing device, and at least one projection on the channel wall projecting inwardly for snap retention of the loading device and/or the pushing device.

- Please replace the paragraph beginning at page 18, line 4, with the following:

moving the collapsed embolic protection filter towards its proximal end in the reception space to engage said at least one the internal proximal stop and disassociate the loaded catheter from the loading device.
- Please replace the paragraph beginning at page 24, line 7, with the following:

Fig. 23A is a ~~cross-sectional~~ cross-sectional view of an alternative loading device;
- Please replace the paragraph beginning at page 24, line 15, with the following:

Fig. 29A is a ~~cross-sectional~~ cross-sectional view on the line AA in Fig. 29;
- Please replace the paragraph beginning at page 26, line 11, with the following:

Fig. 82 is a side, partially ~~cross-sectional~~ cross-sectional view of another embolic protection system;
- Please replace the paragraph beginning at page 26, line 14, with the following:

Fig. 83 is a side, partially ~~cross-sectional~~ cross-sectional view of a further embolic protection device; and
- Please replace the paragraph beginning at page 26, line 17, with the following:

Figs. 84 and 85 are ~~cross-sectional~~ cross-sectional views of a distal portion of catheters.
- Please replace the paragraph beginning at page 28, line 14, with the following:

Referring now to Figs. 2 to 8, the delivery catheter 2 is illustrated in more detail. The delivery catheter 2 comprises a tubular body 10, typically of polyimide, or nylon extending between a proximal end 11 and a distal end 12. At the distal end 12 of the tubular

body 10 a pod 13 is provided, the pod 13 having a smaller wall thickness and in this case a larger internal diameter, as illustrated in Fig. 4, to define a reception space for receiving the embolic protection device in a collapsed configuration. The handle handle 14, illustrated in detail in Figs. 5 to 7, is attached to the proximal end II of the tubular body 10, with a strain relief member 15 extending from the handle 14 partially along the tubular body 10. The handle 14 defines a central lumen 16 extending between a proximal opening 17 and a distal opening 18. A side port opening 19 is provided in the handle 14, the side port 19 being in communication with the central lumen 16 (Fig. 3). A female luer 20, as illustrated in Fig. 8, is also provided, the luer 20 being fixedly mounted in the side port 19. A double-start thread is provided at the free end of the luer 20 for threadable attachment of, for example, a flushing syringe 91 to the luer 20.

- Please replace the paragraph beginning at page 31, line 14, with the following:

During the deployment action the outer shaft or delivery catheter 2 is subjected to high levels of tensile strain. The design/construction of the outer shaft 2 is such that the amount of strain energy that can be stored within the outer shaft is ~~minimised~~ minimized. Low flexural stiffness is also desirable in catheter design to ensure good catheter flexibility, trackability and low insertion forces. These attributes are achieved by incorporating high tensile elements 21 within the wall construction of the outer shaft 2. These high tensile elements 2 can be high tensile longitudinal steel wires as shown in the example below or they may be flexible high tensile wires or fibers, carbon fibers and/or kevlar fibers. These fibers/wires are contained within the wall 22 of the catheter which may be a polymeric material (detailed in Fig. 4A is a polyimide wall). These wires/fibers provide the outer shaft with high tensile modulus (minimal stretch) which results in a shaft that can not store much strain energy. The inclusion of the above high tensile elements 21 allows for a low profile

outer shaft 2. This low wall thickness outer catheter shaft therefore also has low flexural stiffness, good flexibility, trackability and subsequently low insertion force. The inner surface 23 of the lumen of this shaft 2 is a low friction (PTFE) material to minimise the friction strain energy incurred during the deployment action.

- Please replace the paragraph beginning at page 35, line 18, with the following:

As illustrated in Figs. 18 and 19, the distal end 48 of the frame 42 acts to reinforce the proximal section of the guide olive 57 and prevents flaring of the sleeve 43. The guide olive 57 has a soft distal tip 58.[[.]]

- Please replace the paragraph beginning at page 36, line 1, with the following:

A transition element 61 is fixedly mounted to the proximal end 46 of the sleeve 43, in this case by means of an adhesive bond. The transition element 61 is sized to fit made the lumen of the delivery catheter 2 to provide a smooth stiffness transition and prevent kinking.

- Please replace the paragraph beginning at page 36, line 1, with the following:

When the assembled pack 4 is required for use, the seal is broken, the pack 4 is removed and the syringe 91 is removed from the recess 92. The luer 20 of the delivery catheter 2 is rotated through 90° in a “bolt-action” to release the luer 20 from the snap-fit retaining projections 9 in the tray 5, as illustrated in Figs. 24 and 25. The delivery catheter 2 is now slidable proximally in the channel 6, and the luer 20 is now accessible for flushing (Fig. 25). The syringe 91 is used to flush the delivery catheter 2 through the luer 20 (Fig. 26) and to flush the inner catheter 25 through the proximal opening 34 in the female luer piece 36 of the inner catheter 25 (Fig. 27). A saline solution is generally used for flushing the catheters 2, 25. The syringe 91 is also used to fill the bath 90 with saline solution, thereby immersing the filter element 40, the reception space of the delivery catheter 2 and the

loading device 7 in the saline solution. This ensures that all the air is removed from the system.

- Please replace the paragraph beginning at page 44, line 10, with the following:

In this case, the guidewire 99 is partially of stainless steel, and partially of a radioopaque radiopaque material to aid the user in positioning the guidewire 99 accurately in a vasculature. The guidewire 99 has a coating of a low friction material, for example of a fluoropolymer such as polytetrafluoroethylene, or of a silicone material, or of a hydrophilic material, for ease of advancement of the guidewire 99 through a vasculature and ease of exchange of the filter element 40 and /or other medical devices over the guidewire 99.

- Please replace the paragraph beginning at page 50, line 5, with the following:

The retrieval filter element 40 is then withdrawn from the vasculature 110 by withdrawing the retrieval catheter 3 and the centring centering catheter 121 together from the vasculature 110.

- Please replace the paragraph beginning at page 50, line 5, with the following:

When the bare guidewire 99 is left in place in the vasculature 110 after withdrawal of the retrieval catheter 3, a further treatment or diagnostic means may be advanced over the bare guidewire 99 to access any desired location in the vasculature 110. The position of the bare guidewire 99 may be adjusted proximally or distally, as desired, to suit a further treatment or diagnostic procedure. Otherwise a fluorescopic fluoroscopic assessment of the treated vessel may be made through the guiding catheter or sheath prior to withdrawal of the guidewire. This is desirable.

- Please replace the paragraph beginning at page 62, line 5, with the following:

The invention gives greater freedom to a user by providing a choice of guidewires to suit a ~~patient~~ patient's anatomy without requiring the user to select the embolic protection device to be used with the guidewire until after successful crossing of a lesion with the guidewire.